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ABSTRACT

This study examines the link between human capital endowments of Southern workers and their labor force experiences over time. Using a national longitudinal survey, the experiences of 4,566 individuals who left high school in 1982 were traced through 1992. Findings show similar patterns of educational attainment between women and men, but African Americans lagged behind Hispanics and Whites with regard to postsecondary education. Educational attainment was linked to family size and parental education levels. Those with greater levels of education were better positioned to improve their labor market sector employment over time. Employment security and chances of securing higher wages were clearly linked to education. Persons with the least amount of education were the most likely to receive some type of job training. Overall, participants were relatively satisfied with their jobs, regardless of educational attainment. Regardless of race or ethnicity, the best educated females were less likely than the best educated males to capture primary labor market jobs. College-educated Hispanic males experienced the greatest success in securing primary labor market jobs, while college-educated African American and White males showed similar patterns of engagement in primary labor market jobs. Suburban areas provided the best hope for persons with limited education, high school graduates, and those with certificate or associate degrees to secure good jobs, while rural places held their own in terms of providing the best educated residents good jobs. The South Atlantic region offered the best climate for high school graduates and those with certificate or associates degrees to find jobs in the lower tier of the primary labor market, and for college graduates to get a job in the highest tier of the primary labor market. Programs are needed that develop job skills in non-college bound youth during high school. (Contains 27 references.) (TD)

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Human Capital Endowments and Labor Force Experiences of Southerners: A Ten-Year Perspective

Report Submitted to:

TVA Rural Studies Program
University of Kentucky
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Prepared by:

Lionel J. Beaulieu and Melissa Barfield
Southern Rural Development Center
Mississippi State University

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Introduction

The importance and necessity of securing a college education in order to effectively compete in the labor market continues to be an issue of intense interest in this country. In some circles, researchers and policy analysts argue that our country woefully lacks the capacity to supply workers having the skills needed to effectively compete in today's global economy (Johnston and Packer 1987; Sidor 1992). In other circles, they assert that no significant enrichment in the job skill requirements is taking place in the labor market and, as a consequence, no appreciable deficiency in the human capital resources of our country's labor force exists (Mishel and Teixeira 1991). Those from a third perspective opine that moderate shifts in skills and education requirements are taking place, but these changes are being largely confined to economies situated in the urban areas of the U.S. (McGranahan and Ghelfi 1991). In essence, rural areas are not full partners in the acceleration in the demand for well-educated workers (Killian and Parker 1991; Swaim and Teixeira 1991).

A recent report by Rowley and Freshwater (1999) offers evidence to support the notion that rural areas are facing greater obstacles than urban areas in the face of a global economy. Granted, some of the news is good. The location of automotive plants to rural areas of the region has created good paying high skilled jobs. And the introduction of technology into these worksites has expanded the need for skilled workers. But, low-end jobs persist, positions that many rural workers continue to rely upon in order to make a living. And those who depend on these types of jobs are subjected to more frequent episodes of unemployment/underemployment, or find themselves living below the poverty line.

Unfortunately, the expected shifts in the occupational structure of the South over the course of the next decade points to a continuing polarization of the workforce of tomorrow.

The largest number of jobs (in sheer numbers) are occurring among occupations that will require little education or training beyond a high school degree. At the same time, a significant portion of the fastest growing occupations will demand individuals with a bachelor's degree or with significant levels of relevant training (Barfield and Beaulieu 1999).

The Research Questions

The purpose of this report is to examine the link between human capital endowments of Southern workers and their labor force experiences over time. We do so by following a cohort of individuals who left high school in 1982 and tracing their experiences over the course of a ten-year period. Five sets of questions give shape to our analyses:

1. What formal educational accomplishments have students from the South realized over the course of the 1982-92 period? How many dropped out of high school, how many completed high school only, how many attended/completed technical school or a community college, and how many successfully completed a baccalaureate degree or higher?

2. What labor market experiences did students with differential amounts of human capital experience through 1992? Did college-educated persons secure jobs with better pay, benefits, and opportunities for advancements? What labor market experiences did individuals who were high school dropouts or who completed a high school education only have over this same period of time?

3. Did the educational accomplishments of persons by gender, or from varying racial/ethnic groups, impact the nature of their access to labor market areas?

4. How did these experiences differ by the spatial location of these individuals? Did persons residing in larger urban localities fare better than those residing in smaller, more remote rural areas of the South?

5. Did the labor force experiences of persons with varying human capital endowments differ within various subregions of the South (i.e. South Atlantic Region, East South Central Region, West Central Region)?

Responses to these questions are critical in that they offer an empirical basis for

determining how, and to what extent, one's success in the local labor market arena is linked to one's formal level of education. If the connection is clearcut, the need to further advance the human capital endowments of new entrants into the workforce will be important in order to facilitate their access to the good jobs that are projected to grow at the fastest pace in the South over the next decade and beyond (Barfield and Beaulieu 1999).

A Word About Our Methodology

Serving as the data source for this study is the national longitudinal survey titled **High School and Beyond (HS&B)**. The HS&B effort, which began in 1980, involved a stratified national probability sample of over 28,000 students enrolled as high school sophomores in 1,015 public and private schools across the United States. The student questionnaire, administered on-site at the various high schools taking part in the study, examined individual and family background characteristics, high school and work experiences, and students' future plans. Follow-up studies were conducted by mail in 1982, 1984 and 1986 and involved a sub-sample of nearly 12,000 individuals who had taken part in the 1980 baseline study. All three follow-up efforts were designed to explore students' post-secondary school and work experiences, earnings, unemployment periods, and occupational and educational aspirations (Sebring et al. 1987). In 1992, a fourth follow-up study was carried out involving the same 12,000 panel members who were the source of attention in the 1982, 1984, and 1986 studies.

As a result of information collected in the four follow-up studies, the status of participants' post-secondary activities at various points in time were determined. Individuals who sought formal education beyond high school were asked to specify the nature of their

formal education over the 1982-92 period. Persons who sought employment immediately after high school were asked to detail the nature of their job experiences. Persons who may have dropped out of high school between 1980 and 1982 were also studied and asked to delineate their labor force experiences. The final wave of the HS&B study carried out in 1992 requested detailed experiences of all participants since the time they graduated from high school. The 1992 study recaptured much of what was collected in 1984 and 1986 with regard to job and educational activities of participants, but the major value of this wave was that it was able to secure information on jobs held by participants over the 1982-92 period. Thus, a rich data resource is available in the HS&B study that allowed careful study to be undertaken of the educational attainment and labor force experiences of participants over an extensive period of time.

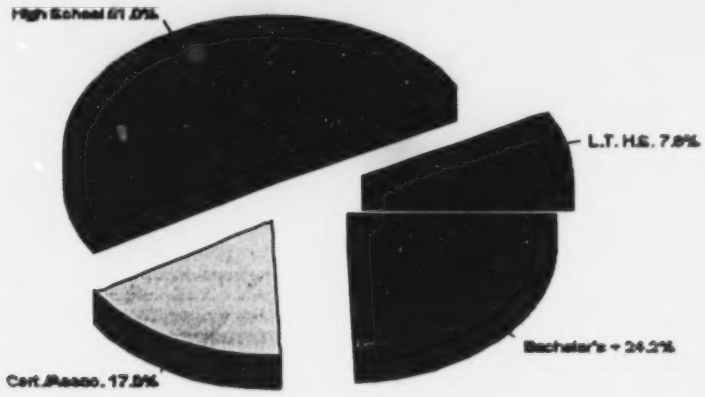
An added feature of the HS&B data set is its capacity to identify the regional residence of HS&B participants. Not only can special focus be directed at persons who were residents of the U.S. South, but further sub-classification of these individuals can be made into the following sub-regions: South Atlantic Region, East South Central Region, West South Central Region. Thus, it is possible to explore whether human capital endowments and labor force experiences of HS&B participants differ within various sub-regions of the South. The number of cases available for us to study as part of this research was 4,566.

Profiling the Educational Credentials of Southern HS&B Participants

The overall educational attainment by 1992 of the pool of Southerners who were part of our study is shown in Figure 1. Surprisingly, nearly 8 percent of the participants who were high school seniors in 1982 never finished their high school education by 1992. In essence, these

individuals were high school dropouts. Over one-half (51 percent) completed their high school

Figure 1. Educational Credentials of Southern HS&B Participants, 19



degree

.[1] As

for post-high school educational experiences, 17 percent of the participants received a certificate or associates degree, while another 24.2 percent successfully secured a baccalaureate degree or more.

Variations in educational attainment by key demographic characteristics of Southerners are reported in Table 1. In general, both women and men show a similar pattern of educational attainment over the span of ten years. As for the pattern by race and ethnicity, African Americans are far more likely to lag behind Hispanics and whites with regard to the completion of a post-secondary education. For example, over 27 percent of white Southerners involved in the HS&B study had secured a baccalaureate degree or higher by 1992. This figure dips to 23.2 percent among Hispanics, and to 16.3 percent among African Americans.

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[1]Some of these individuals did enroll in post-secondary educational activities – be it some college, vocational or technical education – but never completed their program of study.

Table 1. Educational Attainment of HS&B Participants from the South in 1992, by Key Demographic Characteristics (in percent)

Demographic Characteristics	Less than High School	Completed High School	Ceertificate or Associates Degree	Bachelor's Degree +	No. of Cases
Gender					
Male	8.4	53.3	14.2	24.2	1821
Female	7.2	48.9	19.7	24.2	1992
Race/Ethnicity					
Hispanic	7.5	51.3	18.0	23.2	750
African American	8.8	56.6	18.3	16.3	798
White	7.5	48.8	16.4	27.2	2110
Father's Education					
Less than H.S.	12.3	57.9	19.1	1.0	989
Completed H.S.	6.8	56.7	18.5	17.9	820
Certificate or Associates Degree	3.3	47.3	18.8	30.5	695
Bachelor's degree +	0.8	30.6	11.3	57.3	635
Mother's Education					
Less than H.S.	13.1	56.4	19.3	11.2	959
Completed H.S.	6.1	54.2	17.7	21.9	1145
Certificate or Associates Degree	2.7	46.7	17.3	33.3	775
Bachelor's degree +	1.6	31.4	13.5	53.5	437

Table 1. Educational Attainment of HS&B Participants from the South in 1992, by Key Demographic Characteristics (in percent)

Demographic Characteristics	Less than High School	Completed High School	Certificate or Associates Degree	Bachelor's Degree +	No. Of Cases
Number of Siblings					
None	2.1	43.8	20.1	34.0	144
One	5.6	47.2	15.1	32.1	642
Two	5.0	44.2	18.7	32.1	717
Three	6.8	52.1	16.8	24.3	547
Four	8.8	52.4	15.9	22.9	340
Five	11.7	47.3	17.2	23.8	239
Six or more	16.6	53.5	16.6	13.3	458

Indeed, the educational endowments realized by our participants is clearly linked to the education levels of their parents. Be it father's level of education, or mother's, those who grew up in a family where parental education was low were far more likely to be high school dropouts or individuals with a high school education only. At the other extreme, nearly 7 of every ten HS&B participants in the South with a post-secondary education (be it a certificate, an associate's or bachelor's degrees) had mothers or fathers with similar levels of education.

Family size appears to have played a significant role in facilitating, or impeding, educational progress among HS&B respondents. Clearly, individuals who grew up in smaller sized families had a greater chance of completing a college education than did those living in larger families. As a case in point, approximately 1 in 3 persons with no siblings were successful in completing a bachelor's degree or higher by 1992. In contrast, only 13.3 percent

of those with six or more siblings had achieved a college education by the early 1990s.

These data provide an important context for discerning some of the key characteristics of the home that may have created significant barriers to completing a post-secondary education. Many who found themselves with no post-secondary education by 1992 tended to come from large families or from homes where parental education was more limited. Both factors have been outlined in the research literature to have negative effects on the academic aspirations of children while growing up (Smith et al. 1995).

Human Capital Endowments and Labor Force Experiences of Participants: Examining Labor Market Shifts Over Time

A fruitful approach for assessing how well individuals with higher levels of education have fared in the workforce relative to their less well-educated classmates is by classifying the jobs they have all held at various points in time into one of four labor market sectors. Employing the typology developed by Lorence (1987), jobs held by our Southern cohort over the 1986-92 period were assigned into one of four categories: (1) upper tier, primary labor market; (2) lower tier, primary labor market; (3) upper tier, secondary labor market; and (4) lower tier, secondary labor market.[2]

The four-tiered system represents an extension and refinement of the theoretical perspective known as dual labor market segmentation. The central thesis of the dual labor market perspective is that jobs are located in either primary or secondary labor markets

[2]We opted to examine only jobs held by our participants since 1986 because this would have given most 1982 high school graduates enough time to have completed their post-secondary educational activities and to have moved into the workforce. As such, a most realistic assessment of the link between human capital endowments and labor force experiences could be undertaken.

(Doeringer and Piore 1971; Piore 1969). A sampling of key attributes associated with primary sector jobs is that employment tends to be stable and secure, wages are high, the working conditions are good, workers are punctual and dependable, investment in employee training is extensive, and worker turnover is low. While primary sector jobs generally have entry level requirements, once hired, the existence of internal labor markets accords workers the opportunity for upward mobility (Althauser and Kalleberg 1981; Beaulieu and Mulkey 1995; Doeringer and Piore 1971).

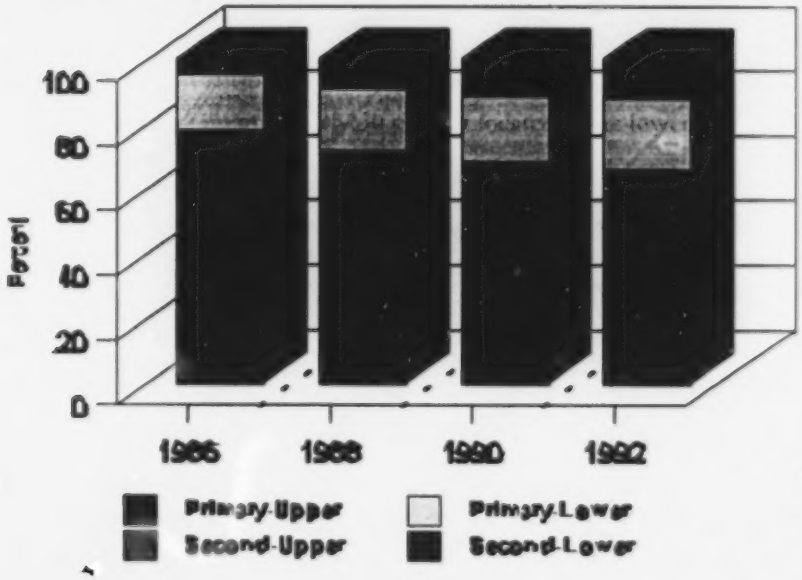
Secondary labor market jobs, on the other hand, offer workers few if any opportunities for advancement given that internal labor markets are rarely present. Furthermore, employment is unstable and jobs insecure. Requirements for gaining entry into these positions are virtually non-existent. Both wages paid and work conditions tend to be poor. Few, if any, job training programs are extended to workers, so employee commitment to the job is low. As a consequence, worker turnover, absenteeism, and tardiness are extensive (Althauser and Kalleberg 1981; Beaulieu and Mulkey 1995).

Dual labor market advocates (Gordon 1972; Rumberger 1981) note that mobility between primary and secondary labor markets is generally difficult. Because of limited training, irregular work histories, and inadequate job experiences, secondary sector workers lack the credentials to gain entrance into the primary labor market-based jobs. But such lack of access can be attributed to such factors as gender and race/ethnicity. Evidence suggests that women and racial and ethnic minorities tend to have poor jobs located in the secondary sector of the labor market and few are accorded access to primary occupations over time (England 1992; Glasgow et al. 1993; Marshall and Briggs 1989).

- ***Employment by Labor Market Sectors: An Overview***

An appropriate beginning point for the discussion of labor market experiences of Southern HS&B participants is to examine the nature of their involvement over the 1986-92 period, irrespective of their educational endowments. Figure 2 visually captures the shifts that occurred in the labor market sector engagement of our study participants since 1986. Among those who were in the labor force in 1986, most were employed in secondary labor market sector jobs, with over 48 percent being in the upper tier, and nearly 30 percent located in the lower tier, of the secondary labor market. Few found themselves in upper tier primary labor market sector positions at this time (i.e., 6.4 percent), while 16.5 percent had secured a job in the lower tier, primary labor market. Over the next six years, entrance into upper tier, primary sector jobs nearly doubled, with 12 percent being employed in this tier by 1992. Lower tier, primary sector employment grew a modest amount — from 16.5 percent in 1986 to 21.6 percent in 1992.

Figure 2. Employment by Labor Market Sector, 1986-92

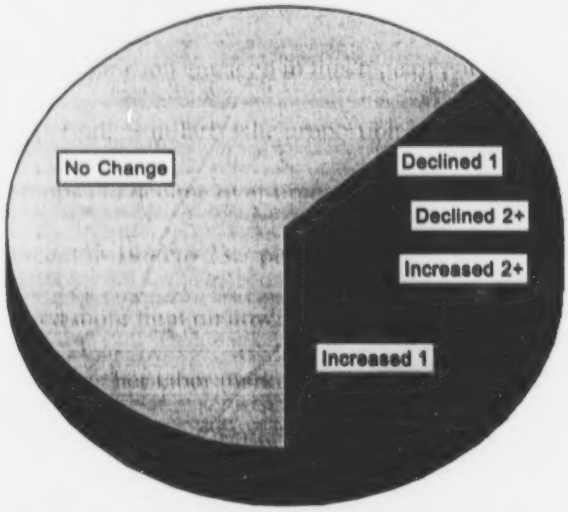


Without question,

most Southerners taking part in this study landed jobs in the upper level of the secondary labor market. Furthermore, the proportion engaged in this type of employment remained relatively stable over the 1986-92 period. Similarly, the proportion of respondents with lower tier, secondary labor market jobs did decline over time, although the extent of those declines were not large (from 29.8 percent in 1986 to 23.7 percent in 1992).

Figure 3 helps shed more light on how well each HS&B study participant fared with regard to realizing gains in his/her labor market sector position during the six year period. The results show a tremendous amount of stability in the labor market position of Southerners. Over 62 percent did not realize any shift in their labor market location. Just over 9 percent

Figure 3. Shifts in Labor Market Sector Tiers of Participants, 1986-92



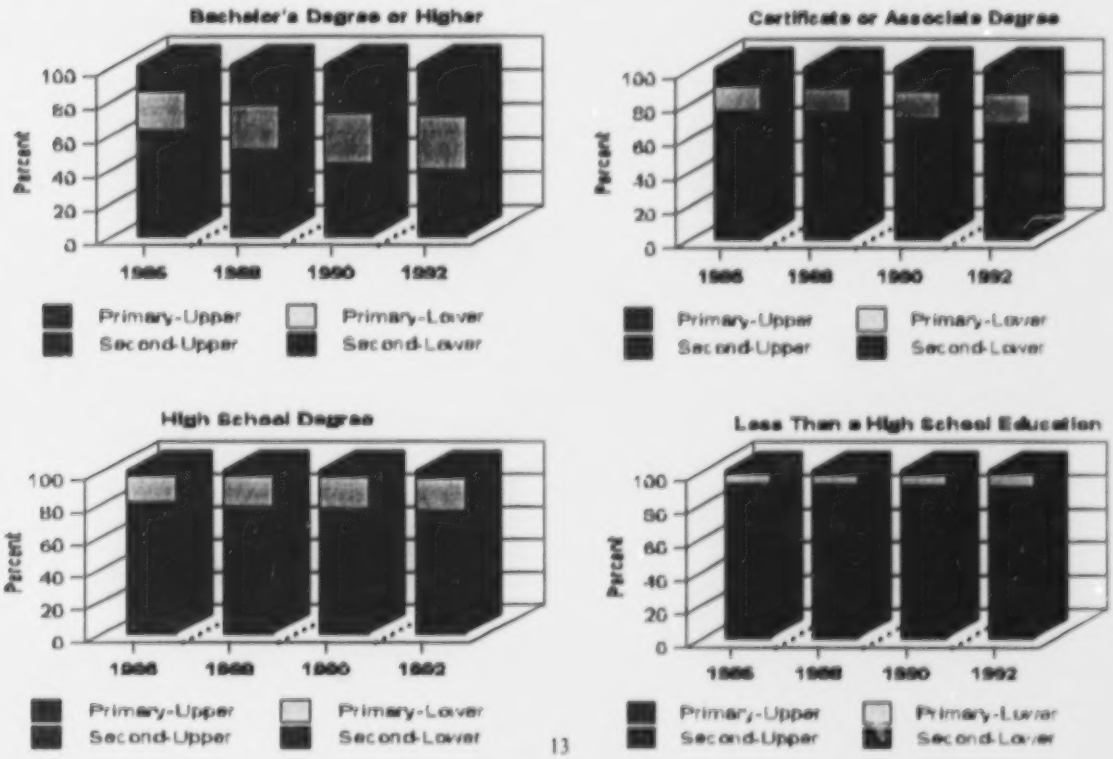
experienced a 1 tier decline, and 3.2 percent slipped by 2 or more tiers in the labor market. Among those who improved their labor market location, about 17 percent moved up one tier, and another 8.4 percent ascended by two or more tiers over the six year time span.

Labor Market Experiences and Human Capital Endowments

One of the central issues of this study is whether individuals who possess a greater amount of human capital -- as reflected in educational attainment -- experience a greater level of success in the workforce. The information displayed in Figure 4 begins to shed some light on this matter (the detailed data utilized to create these figures can be found in the Appendix, Table A.1). At either extremes of the education ladder — those with a baccalaureate degree or better, or with less than a high school education — the role that human capital endowments plays in shaping the labor market sector engagement of these individuals is clearcut. Over the span of 1986-92, those with a college education (or at least, those who were working on their college degrees and who received them by 1992) were the most likely to realize consistent gains in their involvement in the upper and lower tiers of the primary labor market sector. In fact, securement of upper level primary sector jobs doubled among college educated participants over the six-year period, while employment in the lower tier of this market expanded by nearly 43 percent. Given these gains, it should be no surprise that the employment of college-educated persons in lower tier secondary labor market sector jobs declined from 17.2 percent to 4.9 percent between 1986 and 1992.

Among the poorest educated Southerners in our study, the percent employed in either upper or lower tier secondary labor market jobs was sizable and remained so for the entire six-year period (never dipping below the 91.8 percent mark at any time). These individuals were virtually shut out from any jobs in the upper tier of the primary labor market, while only a small fraction of people broke into lower tier, primary labor sector type positions.

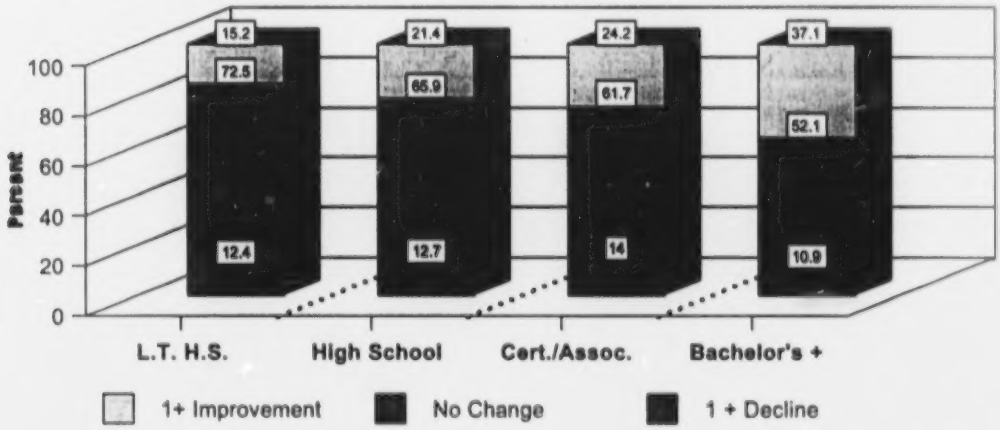
Figure 4. Labor Market Sector Experiences of Southern HS&B Participants Over the 1986-92 Period, by Their 1992 Educational Status



High school degree holders, and those with a certificate or associate's degree, had workforce experiences that fell somewhat in-between those with limited education and those with a bachelor's degree or higher. High school completers showed slow, but steady progress in escaping from the lowest rung of the labor market over time. At the same time, they gained some success in tapping jobs in the the primary labor market sector. By 1992, nearly 1 in four persons with a high school diploma were employed in the primary labor market.

The benefit of having a certificate or associate's degree resulted in slightly better job experiences in the labor market than was the case for their cohort who were high school only graduates, but left our participants significantly behind those with a baccalaureate degree or more. After a six-year period, the largest share of those with a certificate/associate's degree were employed in upper jobs situated in the secondary labor market. But, some of the people with this educational credential realized modest gains in their primary labor market participation. For example, 14.5 percent of those with a certificate or associate's degree held lower tier, primary market sector jobs in 1986, a figure which inched up to 17.8 percent by 1992. Similarly, some 9.3 percent of the individuals in this educational grouping were gainfully employer in upper level, primary sector jobs in 1986, a number that increased to 14 percent six-years later.

Figure 5. Shifts in Labor Market Tiers in Which Employed, 1986-92 by Education



To further our understanding of the dynamics of labor markets shifts among workers with varying levels of education, we examined the extent to which our participants realized any upward (or downward) movement in labor market tiers over the course of the 1986-92 period. The results of our analysis are presented in Figure 5.

Our findings clearly show that those with greater levels of education are better positioned to improve their labor market sector employment over time. College educated persons were twice as likely as persons with no high school education to have improved their labor market sector tier over the 1986-92 period. The lion's share of persons with less than a high school education remained entrenched in the same labor market tier over this time period. Relative to their less educated colleagues, high school graduates and those with certificate or associate degrees were more likely to experience some upward movement in their labor market sector position. A majority of these people, however, remained tied to the same labor market

sector during the entire 1986-92 time period.

- ***Job Security and Benefits by Educational Levels of Workers***

Unemployment Spells

It is often stated and documented that unemployment experiences tend to be more common among those with lower educational credentials. As such, those with higher level of education have greater job security and are less likely to experience episodes of unemployment. The nature of the links between education and unemployment was explored for Southerners who were part of the HS&B study.

Table 2 shows the percentage of individuals by educational status who were ever unemployed during any month over the 1986-92 period of time. It also reveals the total number

Table 2. Levels of Unemployment of HS&B Participants from the South During the Period 1986-92

Unemployment Characteristics	Less than High School	Completed High School	Certificate or Associates Degree	Bachelor's Degree +
Percent who have been unemployed	28.5	21.7	23.3	21.1
Amount of Time Unemployed				
None	71.5%	78.3%	76.7%	78.9%
1- 6 months	8.1	8.2	9.2	11.1
7-12 months	3.7	3.8	3.5	4.8
Over 1 year	16.6	9.8	10.6	5.3
No. of Cases	295	1944	651	923

of months during a six-year period that spells of unemployment were experienced by our participants, specifically by the level of educational attainment.

Overall, the data reported in Table 2 reveal that most Southerners, irrespective of their educational credentials, remained employed during the entire 1986-92 period. However, those with less than a high school education were slightly more likely to experience at least one month of unemployment. Surprisingly, the second highest percentage who suffered from unemployment at some point during the six-year period were those with certificate or associates degrees. Participants with baccalaureate degrees or higher tended to be the least likely to find themselves unemployed at any time during this period of time.

More informative, however, is the duration of unemployment suffered by those with varying levels of educational endowments. The lower portion of Table 2 outlines the total number of months that our participants were unemployed over the six-year span of time. Contrary to expectation, those with the best educational credentials -- a bachelor's degree or higher -- were the most likely to suffer short-term episodes of unemployment totaling 6 months or less (11.1 percent). Approximately 8-9 percent of participants falling into the other educational categories experienced up to 6 months of unemployment from 1986-92.

Where the benefit of a college education becomes most apparent is when we focus on the group of Southerners who were subjected to the largest number of months of unemployment. Nearly 17 percent of respondents having less than a high school education found themselves unemployed for a total of more than 12 months from 1986-92. This percentage slipped to approximately 10 percent for persons with a high school education or a certificate/associates degree, and dipped to 5.3 percent among those with a college education. What these figures suggest is that the best educated Southerners may find themselves

unemployed for very short periods of time, perhaps during the process in which they are searching for jobs that best fit their educational training, but they are much less likely to be unemployed for long periods of time. It is the least educated who are likely to fall victim to frequent spells of unemployment.

Annual Earnings in 1992

No doubt, one of the most important benefits that a worker can be offered is the level of monetary compensation received for doing one's job. To better assess the linkage between educational status and job-related income, we explored the salaries and wages received by our Southern HS&B participants in the latest job they held in 1992. Results are reported in Table 3. Please note that persons with no reported job-related income were not included in the data reported in this table.

Table 3. Annual Income Received by Southern HS&B Participants in 1992, by Educational Attainment

Education Level	Less than $15,000	$15,000-24,999	$25,000-39,999	$40,000 or more
Less than H.S.	89.4%	6.7%	2.8%	1.1%
Completed H.S.	78.1	1.8	6.4	1.7
Certificate/Assoc. Degree	73.8	16.7	8.9	0.6
Bachelor's degree +	65.1	16.3	13.1	5.6
No. Of Cases	2,157	419	242	72

As expected, as educational level declined, the proportion receiving wages below

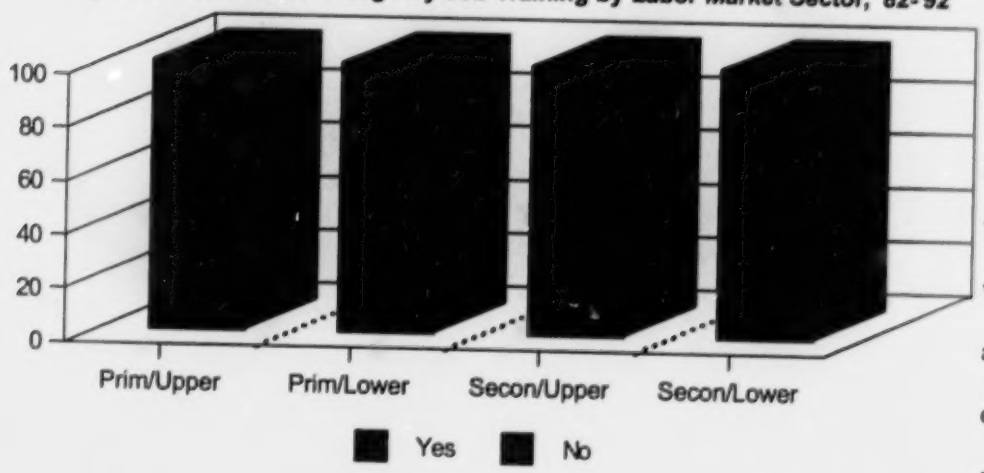
$15,000 increased. Even among college graduates, a sizable percent (65.1 percent) were receiving salaries/wages that placed them in this lowest income classification. However, the chances of securing higher wages were clearly linked to education. Among those in the $25,000-39,999 income category, nearly 60 percent had a certificate/associates or bachelor's degree or higher. In fact, those with a bachelor's degree or more were at least 4 times more likely than those with less than a high school education to be earning this level of income, and five times more likely than the least educated workers to be receiving salaries/wages of $40,000 or more in 1992. If past trends are any predictor of the future, the income gap between the best educated and least educated will continue to widen over time.

- ***Job Training Opportunities Offered to Workers in Different Labor Market Sectors or With Varying Levels of Educational Attainment***

Dual labor market theorists contend the secondary labor market jobs tend to offer limited, if any, job training opportunities for workers, particularly those who are situated in the lowest rungs of this job sector. On the other hand, investment in employee training tends to be much higher in those jobs classified as primary labor market sector positions. We wanted to explore whether the argument advanced by dual labor market theorists could be supported with the data available to us in this study.

Although the HS&B study undertook limited examination of training activities offered to study participants, it did ask respondents whether they had ever received any type of job training over the 1982-92 course of time. Responses to this question are presented in Figure 6.

Figure 6. Percent Receiving Any Job Training by Labor Market Sector, '82-'92

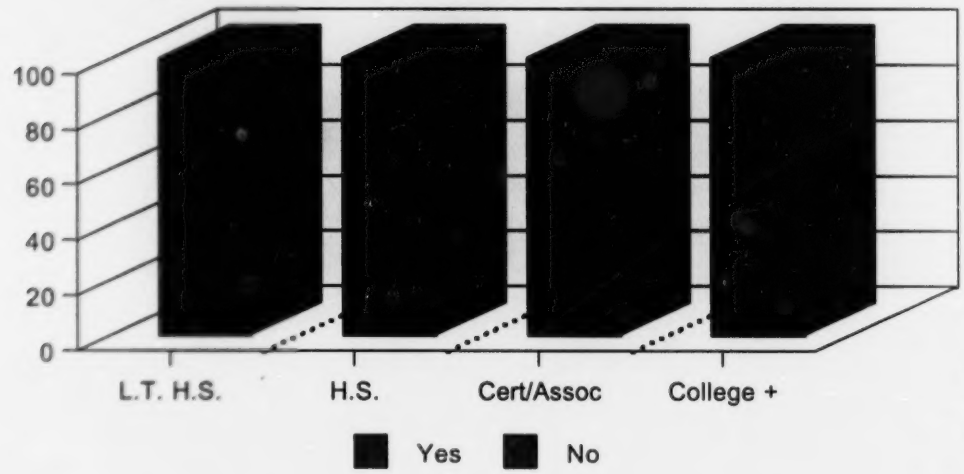


Co ntr ar y to wh at du al labor market theorists would contend, workers employed in secondary labor market jobs were much more likely to have been recipients of some type of job-related training than were

persons employed in primary labor market sector jobs. In fact, the relationship was clearly linear. That is, as one moved from the upper tier, primary sector jobs to the lower tier, secondary labor market jobs, the proportion of workers who were engaged in any kind of job training activity over the ten-year period increased.

To explore this issue from a slightly different angle, we opted to examine job training involvement by the educational level of our participants. The outcome of this examination is visually portrayed in Figure 7. Without a doubt, involvement in any type of job training effort

Figure 7. Percent Receiving Any Job Training by Education, '82-'9



was more likely to occur among persons having the least amount of education. Over two-thirds of Southern HS&B participants in the South with less than a high school education were involved in some type of job training over the decade. This figure slipped to 46.2 percent among

high school graduates, to 31.5 percent among those with a certificate or associates degree, and to less than 19 percent among the best educated persons (baccalaureate degree or higher).

The information contained in Figures 6 and 7 indicates that employers are utilizing job training activities to shore up the skills of those with the most limited human capital. Not surprising, the least educated individuals tend to land in jobs in the lowest rung of the secondary labor markets and as such, they are the group most often targeted for job training activities. The best education workers, because of the diverse set of talents and skills that they bring to the workplace, are often able to adjust to the demands of their jobs with little or no formal job training, even if they are engaged in primary labor market sector employment. So, counter to what dual labor market theorists would contend, secondary labor market sector firms do offer job training programs that are designed to improve the capacity of their workers to more effectively perform their work responsibilities.

- ***Job Satisfaction by Worker's Level of Education***

In an earlier section of this report, we explored the link between educational endowments and the labor market sector tier in which persons were employed. We observed that persons with a four-year college degree or better were far more likely, over time, to capture jobs in the lower or upper tiers of the primary labor market sector than were persons with a high school education or less. As such, one would expect that persons with less education would experience lower levels of satisfaction since most are employed in secondary labor markets – markets that dual labor market theorists would suggest offer limited opportunities for advancement, limited job security, low wages, and workers with limited job commitment. It is the link between educational attainment and job satisfaction that is the central topic of interest in this section of our report.

Table 4 examines job satisfaction of Southern HS&B participants along eight different dimensions. On an overall basis, individuals involved in our study were relatively satisfied with their jobs. In fact, the highest proportion of people who were unhappy with some aspect of their job never exceeded the 38.5 percent mark. While some variations were uncovered by education, the differences were modest at best. Granted, rates of satisfaction did increase on the following dimensions as one moved up the education ladder: pay and benefits; working conditions; job security; and educational opportunities. But, only for pay and benefits, job security, and educational opportunities did the gap in satisfaction levels between the least educated and best educated exceed 11 percentage points.

What is most interesting is the fact that these findings run counter to what dual labor market theorists would expect. That is, those with a high school education or less -- those who are the most likely to be employed in secondary labor markets -- show significant levels of satisfaction with their wages, working conditions, opportunities for career advancement, job security, and educational opportunities. These are positive aspects of jobs that dual labor market theorists would contend are simply not available to those employed in secondary labor market jobs.

Gender, Race and Ethnic Characteristics of Participants: Their Links to Labor Force Experiences

As noted earlier, the argument has been advanced that females and minorities are often denied access to primary labor market sector jobs. Instead, most tend to find "bad" jobs situated

Table 4. Job Satisfaction of Southern HS&B Participants in 1992, by Educational Attainment

Dimensions of Job Satisfaction Dimensions	*Level of Education Completed*			
	Less than High School	**Completed High School**	**Certificate or Associates Degree**	**Bachelor's degree +**
Satisfied with Pay and Benefits				
No	37.6%	32.4%	30.3%	25.0%
YES	62.4	67.6	69.7	75.0
Satisfied with Job Challenge and Importance				
No	20.8	21.4	17.9	17.2
Yes	79.2	78.6	82.1	82.8
Satisfied with Working Conditions				
No	19.1	17.6	15.4	11.8
Yes	80.9	82.4	84.6	88.2
Satisfied with Opportunities for Career Advancement				
No	34.4	37.9	38.5	33.7
Yes	65.6	62.1	61.5	66.3
Satisfied with Job Security				
No	34.0	27.5	23.9	22.9
Yes	66.0	72.5	76.1	77.1
Satisfied with Supervisor				
No	14.8	16.6	16.2	14.7
Yes	85.2	83.4	83.8	85.3

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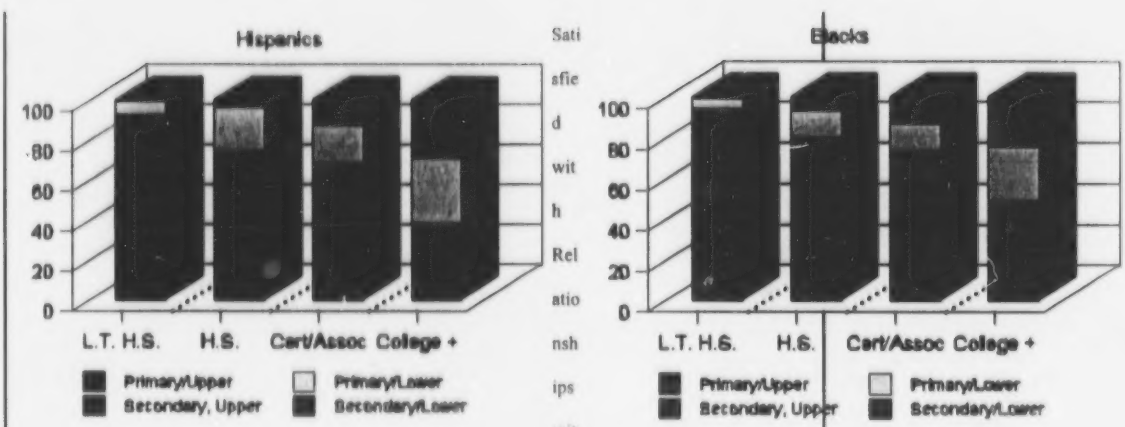
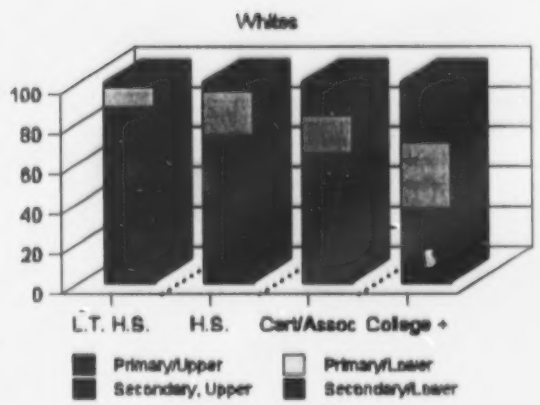


Satisfied with Relationships with Co-Workers

No	2.6	4.0	3.9	3.2
Yes	97.4	96.0	96.1	96.8
Satisfied with Educational Opportunities				
No	38.3	33.1	28.9	22.8
Yes	61.7	66.9	71.1	77.2

Figure 8. Labor Market Sector of Jobs Held by HS&B Participants in 1992, by Race/Ethnicity and Level of Education



in secondary labor markets. To assess whether this was in fact the case for HS&B respondents from the South, we examined the labor market sector employment of study participants in 1992, by the gender and race/ethnic characteristics of persons across the four educational categories of interest in this study.

Figure 8 offers a visual overview of the placement of individuals along the four labor market tiers by race and ethnic background. Among the individuals with the least amount of human capital (i.e., those with less than a high school education), most find themselves employed in secondary labor markets jobs in 1992. However, African Americans are far more likely than Hispanics or whites, to be engaged in lower tier, secondary labor market jobs. African Americans with a high school degree only, or with a certificate/associates degree have less success than Hispanics or whites in capturing jobs located in the lower or upper tiers of the primary labor market. At the highest rung of the education ladder (those with a baccalaureate degree or more), success in securing primary labor sector jobs is far more pronounced. However, the proportion of college graduates employed in primary labor sector jobs (be they upper or lower tier positions) is highest among Hispanics (61 percent), followed by whites (52.7 percent) and African Americans (50 percent).

To further illuminate this discussion, we examined the labor market experiences of individuals, while simultaneously considering their race/ethnicity and gender characteristics. This more in depth assessment is presented in Table 5. Among the least educated Hispanics, labor market sector employment differed little by gender. While some variation among Hispanic males and females did exists for those with a high school education or with a certificate/ associates degree, it was among the best educated where differences were the most sizable. Approximately 50 percent of Hispanic females with a four-year college degree or

more were

Table 5. Labor Market Tiers in Which HS&B Participants were Employed in 1992, by Their Race/Ethnicity and Educational Levels

Race/Ethnicity/ Gender	Labor Market Sector			
	Primary/Upper	**Primary/Lower**	**Secondary/Upper**	**Secondary/Lower**
Hispanic Males				
LT H. S.	0.0%	6.7%	36.7%	56.7%
High School	2.2	24.6	48.1	25.1
Cert/Assoc.	9.3	24.1	42.6	24.1
College +	32.3	43.5	22.6	1.6
Hispanic Females				
LT H. S.	0.0	8.3	50.0	41.7
High School	4.0	18.7	56.0	21.3
Cert/Assoc.	14.9	14.9	50.7	19.4
College +	25.8	24.7	47.2	2.2
Black Males				
LT H. S.	0.0	8.7	13.0	78.3
High School	4.3	11.9	36.2	47.6
Cert/Assoc.	6.5	17.4	41.3	34.8
College +	33.3	35.7	23.8	7.1
Black Females				
LT H. S.	0.0	0.0	50.0	50.0
High School	8.2	13.7	48.1	30.1
Cert/Assoc.	16.7	9.7	48.6	25.0
College +	18.6	20.0	51.4	10.0
White Males				
LT H. S.	1.5	10.6	48.5	39.4
High School	3.4	22.7	44.7	29.3
Cert/Assoc.	6.7	23.3	40.8	29.2
College +	30.0	40.0	25.4	4.6
White Females				
LT H. S.	2.1	8.5	31.9	57.4
High School	4.6	21.4	51.9	22.2

Cert/Assoc.	22.6	16.1	43.5	17.9
College +	28.9	26.5	39.5	5.1

employed in primary labor market sector jobs in 1992. For Hispanic men, the figure approched the 76 percent mark. Clearly, a college degree offers greater opportunities to secure a primary labor market sector job for Hispanic men that for Hispanic females. The trends uncovered for Hispanics are even more dramatic when one examines the figures for Blacks. In general, African American males and females experienced similar labor market placements if they had a certificate/associates degree, a high school education, or less than a high school education. Among the best educated Blacks in our study, however, the number who were able to capture primary labor sector jobs by 1992 stood at 69 percent among male African Americans, but 38.6 among female African Americans. In other words, Black females with a college degree were 44 percent less likely to gain entre into a primary labor market sector job than were Black males with similar educational credentials.

The bottom portion of Table 5 outlines the experiences of white males and females. What one finds is that white females with less than a high school education were more likely than their male counterparts to be employed in the lowest rung of the labor market (57.4 percent vs. 39.4 percent). Only modest differences were found for those with a high school or a certificate/associates degree. For the college educated study participants, white males were more likely than white females to garner jobs in the primary labor market sector (70 percent vs. 55.4 percent).

What this more in-depth analysis helps uncover is the crucial role that gender plays in labor market sector employment. That is, regardless of one's race or ethnic background, the best educated females are far less likely than the best educated males to capture job in the

primary labor market sector. Hispanic males with college + degrees experience the greatest success in securing primary labor market jobs, while college-educated African Americanmen and white males show similar patterns of engagement in primary labor market sector jobs. Among females, it is the cohort of African Americans that appears to have the most difficult time gaining entrance into primary labor market sector jobs.

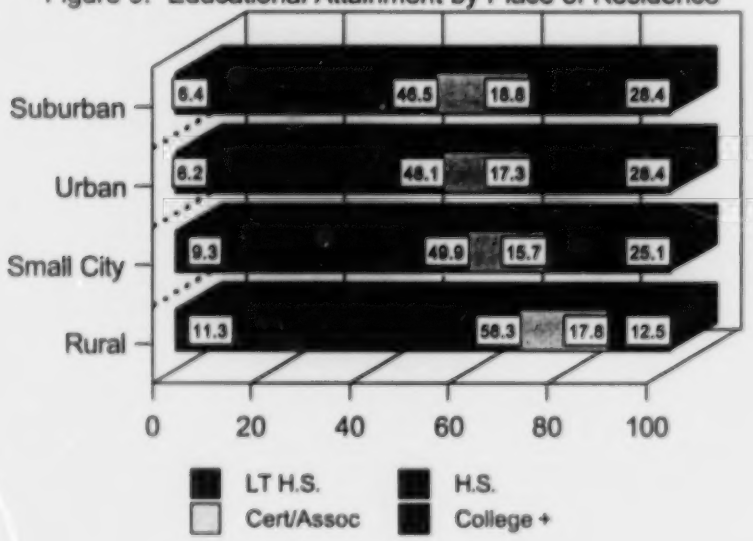
Access to Labor Market Sectors: The Role of Place of Residence

Dual labor market analysts note that urban communities are better able than their rural counterparts to capture primary labor sector jobs. Decisions made by management tend to relegate the lower skilled, routine production jobs to rural areas, while the more skilled professional, managerial, and technical jobs are placed in urban localities (Killian and Beaulieu 1995). A similar pattern is found among the producer service industries. Porterfield and Killian (1994), for example, examined the rate at which producer services were becoming more concentrated in metropolitan areas or decentralized, as evidenced by their movement to the rural periphery. They found that those services that were becoming decentralized tended to offer low wages and part-time employment, while those becoming more concentrated in urban areas consisted of higher status, well-paying jobs. What these trends suggest is that workers living in rural areas are likely to be less able to capture jobs in the primary sector given that rural areas are dominated by secondary labor sector employment opportunities. A recent study by McGranahan and Ghelfi (1998), however, offers evidence that such trends may be weakening. Rural labor markets are now showing signs of an expanded demand for better educated workers, although urban areas continue to outpace rural areas in terms of their need

for college-educated employees.

We begin by examining the human capital distribution of our Southern HS&B as of 1992 by their place of residence in 1986. Unfortunately, the HS&B study did not request place of residence from their study participants during the 1992 follow-up study. Thus, for purposes of this analysis, we had to assume that the size of place that people stated they lived in 1986 remained the same in 1992. We further assumed that most were employed in jobs that were physically located within their same place of residence.

Figure 9. Educational Attainment by Place of Residence



Consistent with expectation, the most educated study participants tended to reside in suburban and urban areas (see Figure 9). In fact, the percentage of persons with a baccalaureate degree or higher was two times greater in suburban or urban areas than it was in rural localities. On the other hand, nearly 70 percent of rural HS&B participants in the South had a high school education or less.

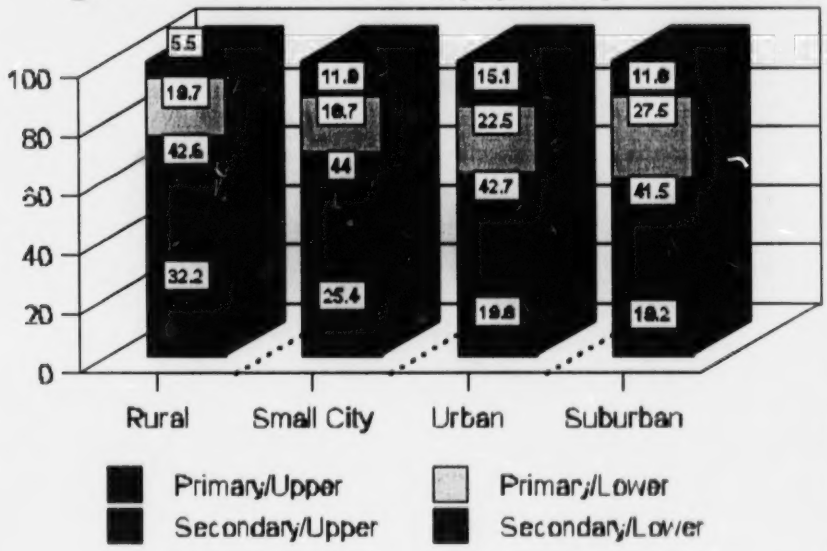
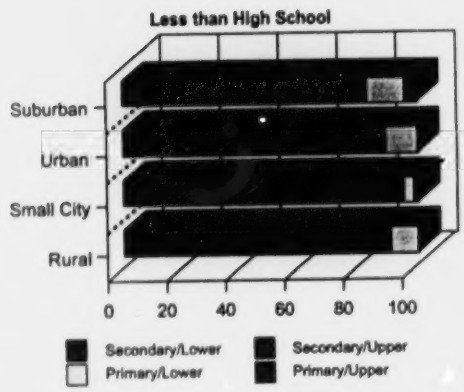
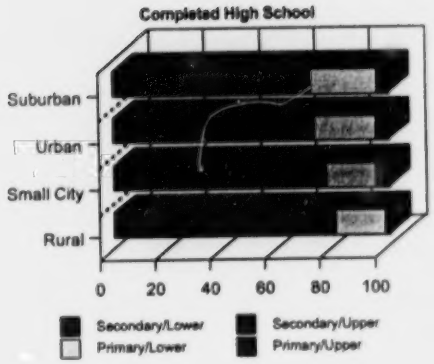


Figure 10. Labor Market Sector Employment , by Place of Residen

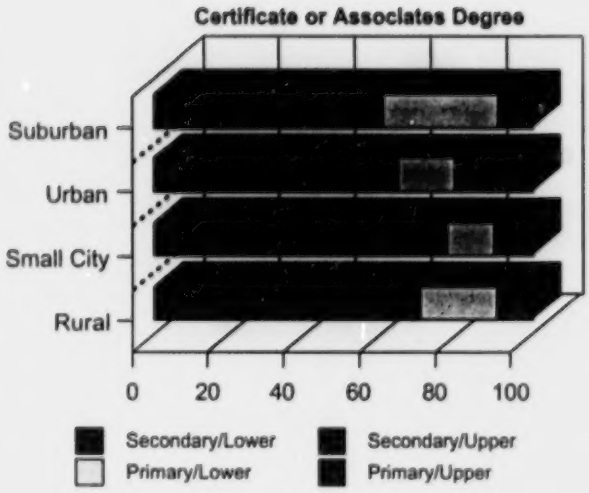
Most germane to our study, however, is variations that might have existed in labor market sector employment of individuals by their place of residence. Figure 10 offers information to address this issue. Consistent with past research regarding the spatial distribution of labor markets, it does appear that HS&B participants in the South who lived in rural or small places were more likely than their urban or suburban counterparts to be employed in secondary labor market jobs. Simply put, suburban residents faced the best prospects of securing





employment in the upper or lower tiers of primary labor markets (39.3 percent), followed by urban residents (37.6 percent) and small town residents (30.6 percent). Approximately 1 in 5 rural residents in our study were employed in 1992 in primary labor market sector positions.

The one issue that remains to be addressed is whether the human capital resources that an individual possessed was likely to offer him/her differing access to labor market areas across residential locations. For example, were college-educated workers more likely to secure primary


Certificate or Associates Degree
Suburban
Urban
Small City
Rural
0
20
40
60
80
100
Secondary/Lower
Primary/Lower
Secondary/Upper
Primary/Upper

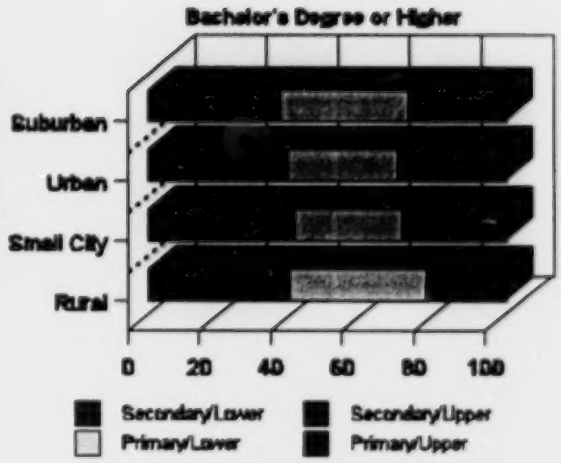

Bachelor's Degree or Higher
Suburban
Urban
Small City
Rural
0
20
40
60
80
100
Secondary/Lower
Primary/Lower
Secondary/Upper
Primary/Upper

Table 11. Labor Market Experiences of Southern HS&B Participants, by Place of Residence

labor market sector jobs in suburban areas than in rural areas? Figure 11 provides information to help address this very issue.

The lion's share of individuals who had the least amount of education in 1992 (i.e., less than a high school education) tended to be employed in secondary labor market jobs, irrespective of residential location. However, those living in rural areas were much more likely to be situated in the lower tier of the secondary labor market. Suburban places provided the best hope for persons with limited education to secure primary labor market sector jobs (with nearly 17 percent in lower or upper tier positions in this market sector). Even in rural areas, over 9 percent with less than high school education held jobs in the lower tier of the primary labor market.

For high school graduates, the prospects of capturing better jobs in the primary labor market sector improved modestly as one moved from rural areas to suburban areas. For example, just under 20 percent of our study participants living in rural places were employed in primary labor sector jobs in 1992. This figure inched up to 22.6 percent among those in small cities, 26.8 percent for urban residents, and 28 percent among persons living in suburban areas of the South.

The pattern for those with a certificate or associates' degree is quite mixed. These individuals fared worst in small cities than they did in rural areas. Nearly 78 percent residing in small cities were employed in secondary labor market jobs, versus 70.6 percent for persons living in rural areas. It was in suburban communities where persons with these educational credentials were most successful in securing primary labor market sector jobs (39.3 percent),

followed by urban localities (35.3 percent) and rural areas (29.4 percent).

While one would expect suburban and urban areas to offer the most hospitable environment for college-educated persons to acquire primary labor market sector jobs, what Figure 11 presents is a remarkable pattern of similarity across places of residence. In essence, the Southern HS&B participants who had a bachelor's degree or higher in 1992 were as likely to find primary labor market jobs in rural and small cities as they were in urban or suburban areas. On average, 6 of every ten persons holding this educational credential had jobs in lower or upper tier primary labor markets in 1992, regardless of their place of residence. The only caveat is that more of these jobs were located in the lower tier of the primary labor market in rural areas than proved to be the case in any other spatial location. This suggest that rural places are holding their own in terms of providing the best educated residents decent jobs in the community.

Labor Force Experiences Within Sub-Regions of the South

The South is an area of great diversity. Some areas of the Southeast United States encompass states that are experiencing tremendous population and economic expansion — such as Georgia, Florida and North Carolina. Other areas of the region, such as the Appalachian, Mississippi Delta, and Rio Grande Valley, are blanketed with people and communities that are struggling because of poverty and limited economic opportunities. It is in recognition of the vastness of the South that we opted to explore the labor market experiences of our Southern HS&B participants across various sub-areas of the region.

For purposes of this study, we divided the U.S. Census South into the following three sub-

regions:

South Atlantic	Delaware; Washington, DC; Florida; Georgia; Maryland; North Carolina; South Carolina; Virginia; West Virginia
East South Central	Alabama; Kentucky; Mississippi; Tennessee
West South Central	Arkansas; Louisiana; Oklahoma; Texas

It is important to note that none of the HS&B follow-up studies conducted in 1984, 1986, or 1992 with the cohort of 1982 high school seniors requested information on the sub-regions of the country in which persons were living. As a result, we had to employ the sub-regional classification created in the 1982 study. By so doing, we are making the assumption that most of the individuals who lived in a certain sub-region of the South in 1982 remained in this same sub-region in 1992. Certainly, this would not apply to all cases, but we feel that a good share of HS&B participants remained in the sub-region of the South in 1992 as they been in 1982.

Before examining labor market experiences of HS&B participants across various areas of the South, it would be informative to examine how the human capital endowments of these individuals might vary across the three sub-regions. The results of this analysis are presented in Figure 12. The information outlined in this figure indicate that HS&B participants located in the East South Central area of the South had the greatest likelihood of attracting individuals with a high school education or less (64.1 percent). On the other hand, the South Atlantic area had the largest number of HS&B participants who completed a post-secondary education program (43.3 percent).

The issue that is more germane in this study, however, is whether the employment patterns

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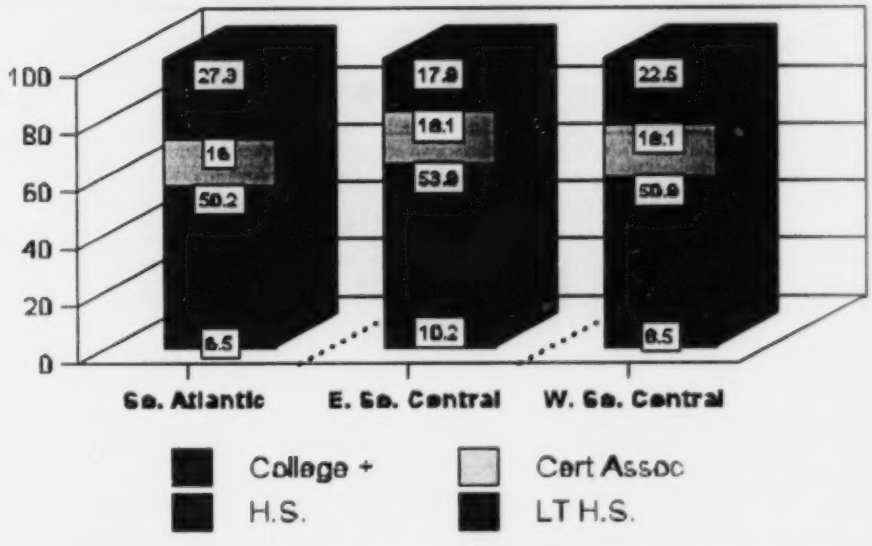
of the HS&B participants with varying levels of human capital were comparable across the three sub-regions in 1992. For example, were individuals with college educations more

Figure 12. Educational Level by Sub-Regions of the South

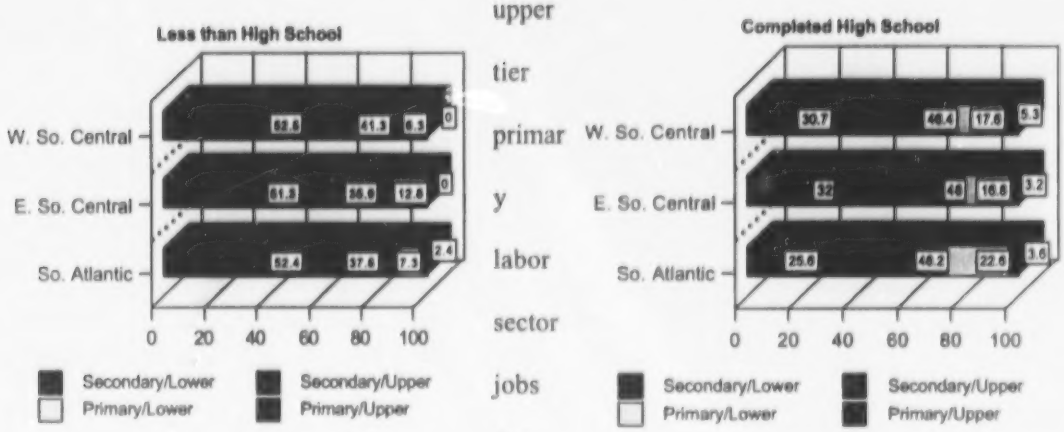


likely to find better jobs in one sub-region of the South than another? The information outlined in Figure 13 offers an interesting perspective on this question.

The profile of persons with less than a high school education were nearly identical across the three sub-regions of interest. That is, similar proportions were employed in either lower or upper tiers of the secondary labor market. The East South Central area of the South appeared to be the most successful place for persons with limited education to have a chance to find employment in lower tier primary labor market sector jobs (with 12.8 percent having jobs in this tier in 1992).

Among high school graduates, the South Atlantic area offered a slight advantage in finding primary labor market jobs over those found in the West South Central and East South Central areas. As for persons with a certificate or associates degree, the results were far more varied. For example, nearly one-third of this educational group were employed in the lowest tier of the secondary labor markets in the East South Central area, a stark contrast to the 19.3 percent in the South Atlantic area. On the other hand, the East South Central area offered the best access to upper tier primary labor sector jobs for persons with this educational credential (16.7 percent). In general, having this type of post-secondary education did provide HS&B participants better access to good jobs than was the case for those with a high education only.

Among high school graduates, the South Atlantic area offered a slight advantage in finding primary labor market jobs over those found in the West South Central and East South Central areas. As for persons with a certificate or associates degree, the results were far more varied. For example, nearly one-third of this educational group were employed in the lowest tier of the secondary labor markets in the East South Central area, a stark contrast to the 19.3 percent in the South Atlantic area. On the other hand, the East South Central area offered the best access to



upper tier primary labor sector jobs for persons with this educational credential (16.7 percent). In general, having this type of post-secondary education did provide HS&B participants better access to good jobs than was the case for those with a high education only.

For HS&B participants with a four-year college degree or better, all regions provided decent opportunities to secure primary labor market sector jobs. Capturing upper tier primary labor market sector jobs appeared to be highest in the South Atlantic sub-region (30.8 percent), followed by the West South Central area (27.5 percent), and then the East South Central location (24.4 percent). On the other hand, it was the East South Central area that offered college-educated persons employment in the lower tier of the primary labor market. Perhaps what is most surprising is the sizable proportion of persons with baccalaureate degrees or better

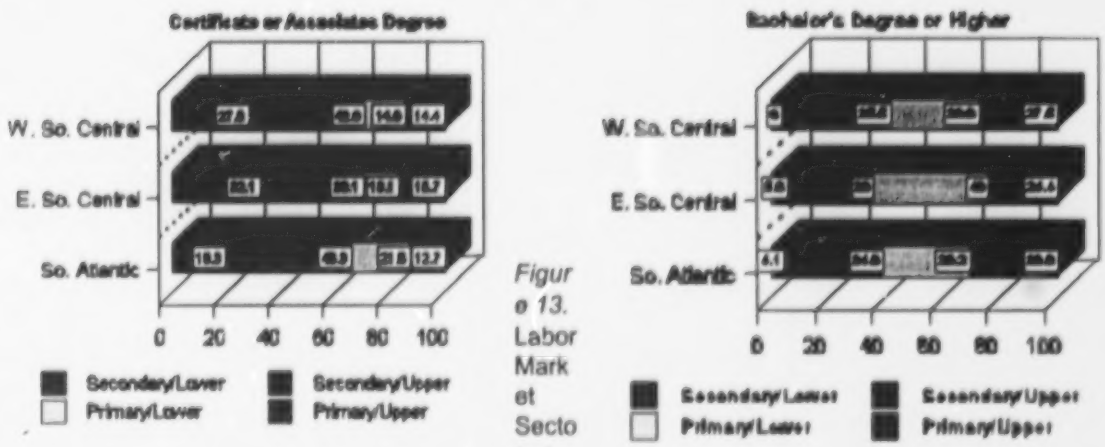


Figure 13. Labor Market Sector

Employment in 1992 of HS&B Participants in Sub-Regions of the South They Were Residing in, by Educational Level

that held jobs in secondary labor markets. The percentages were highest in the West South Central area (41.5 percent) and lowest in the East South Central area (35.6 percent). This suggest that these individuals could have been underemployed in that they were not able to capture jobs that took full advantage of their educational credentials. This may not be an unreasonable observation in light of the fact that the early 1990s remained a period of economic uncertainty in many areas of

the South due to continued difficulties in the goods producing sectors of the economy and the intensification of competition in the global marketplace.

Summary

This study has sought to delve more deeply into the link between human capital endowments and labor force experiences in the South. Adopting a dual labor market segmentation perspective, we wanted to explore whether the type of jobs individuals secured over time was directly tied to their educational attainment. Furthermore, we wanted to determine if race, ethnic background, and gender gave shape to these labor force experiences. Finally, we wished to examine if certain spatial characteristics, such as an individual's place of residence, or sub-regional location in the South, had impacts on the type of labor markets that people with various educational credentials would gain entrance into.

While some of our findings were in accord with the expectations of labor market theorists, others were not. Some of the highlights of our study are as follows:

Human Capital Attributes

- A decade after graduating from high school (in 1982), over half of the Southern High School and Beyond panel members never secured any formal degree beyond this point. Approximately 24 percent completed a bachelor's degree or more.
- African Americans were as likely as whites and Hispanics to complete their high school degrees, but their rate of college attendance was one-third lower than that of whites or Hispanics.
- The educational attainment of our participants was clearly linked to parental education. Better than 57 of college graduates had a father with a college education; about 70 percent of those with a high school education or lower had parents with less than high school education.
- Educational success was clearly linked to the size of the person's family. The larger the family that a person was raised in, the lower the level of educational completion.

Labor Force Experiences

- The majority (62 percent) of HS&B participants, on an overall basis, did not realize any improvement in their labor market sector position over the 1986-92 period. However, this pattern was not consistent across all educational or demographic groups.

- Over the 1986-92 period, college-educated persons in our study were able to double their rate of employment in upper tier primary sector jobs and were able to expand their engagement in lower tier primary sector jobs by 43 percent.

- While not keeping pace with the best educated cohort of HS&B participants, persons with a certificate or associates degree experienced slightly better job advancement over the six-year time period than was the case for high school only completers.

- The least educated individuals in our study (those with less than a high school education) were essentially denied access to primary labor market sector jobs. Nearly nine of every 10 of these persons remain entrenched in secondary labor market sector jobs for the entire 1986-92 period.

Job Security and Benefits

- Contrary to what dual labor market theorists would suggest, most Southerners in our study remained employed over the course of the six years we examined. In fact, college graduates were the most likely to experience 1-6 months of unemployment. On the other hand, longer spells of unemployment (exceeding one year) did tend to occur more frequently among those with less than high school education.

- As expected, income compensation was directly linked to educational attainment. The best educated Southern HS&B participants were five times more likely than the least educated to be earning salaries or wages of $40,000 or more (in 1992).

- While the labor market perspective argues that training opportunities are rarely available to persons engaged in secondary labor market jobs (particularly the lower tier of this sector), our study found no support for such an assertion. In fact, involvement in job training was more pervasive among the lower tier secondary labor market workers and least evident among those employed in upper tier primary labor market positions. When examined by education, a similar pattern emerged; involvement in job training activities was most likely to occur among the least educated employees.
- In contrast to the pronouncements of labor market theorists, the majority of persons at the lower rungs of the local labor market were relatively satisfied with their jobs, including such features as their pay and benefits, working conditions, job security, and educational opportunities. Satisfaction levels were equally high, if not more so, among the better educated participants. The key point is that we find little evidence of a disenchanted class of workers at the lowest tier of the labor market.

Labor Market Sector Experiences in 1992 by Race, Ethnicity and Gender

- African Americans with less than a high school education are more likely to employed in lower tier secondary labor market jobs than are Hispanics or whites. Even among blacks with a high school education or a certificate/associates degree, their success in securing better jobs in the primary labor market sector falls short of the pattern uncovered for Hispanics and whites.

- The percentage of persons with a college education who are employed in primary labor market sector jobs in highest among Hispanics, followed by whites and then African Americans.

- When these trends are further dissected by gender, one finds that opportunities to secure employment in primary labor market tiers are much better for males than females across all racial and ethnic groups. The gap is most sizable between African American men and women. Nearly 7 of every 10 black males with a college degree were employed in primary labor market sector jobs in 1992. The rate for black females with the same educational level was less than 39 percent.

Place of Residence and Labor Market Sector Employment

- Our study lends support to the argument that suburban and urban areas offer the best hopes for gaining entre into primary labor market sector jobs versus the case in rural areas.

- Persons with high school education or less, and living in rural areas, had the highest rate of employment in secondary labor market jobs. It is in suburban areas that persons with more limited educational credentials fared best.

- Both suburban and urban areas offered the most hospitable environment for individuals with a certificate or associates' degree, providing a sizable minority of these persons good jobs in the primary labor market sector.

- For the best educated HS&B participant, the prospects of capturing jobs in the primary labor market were nearly as good in rural areas of the South in 1992 as in any other residential location.

Labor Market Experiences by Sub-Regions of the South

- The South Atlantic area of the South offers the best climate for high school graduates to find jobs in lower tier of the primary labor market. This also proves to be true for individuals with a completed certificate or associates degree.

- The chances of a college graduate landing a job in the highest tier of the primary labor market are best in the South Atlantic sub-region, although all three regions have a majority

of their college graduates who are involved in lower or upper tier primary labor market employment. The West South Central area has the largest proportion of college graduates engaged in secondary labor market work.

Conclusions

A recent study by Barfield and Beaulieu (1999) on workforce trends in the South suggests that a polarization is taking shape in the workforce of the future (Barfield and Beaulieu, 1999). In essence, the findings show that a sizable number of new jobs slots (over 58 percent) expected to be created over the course of the 1996-2005 will require no formal education beyond high school. In fact, short-term on-the-job training -- training that can be acquired in less than a month -- is projected to be in greatest demand. Many of these jobs will offer low wage compensation, part-time employment, and be subject to higher rates of unemployment. On the other hand, many of the fastest growing occupations will require associate or bachelor's degrees, or moderate levels of on-the-job training (lasting up to a year). These jobs are likely to be stable and offer decent wage compensation. But, the number of slots being created in the fastest growing occupations will pale in comparison to the number of jobs being created in less-skilled occupations.

In many respects, the ticket for securing these better paying jobs – most which will be situated in primary labor market areas – will be one's educational endowments. Given the projected jobs growth noted above, individuals with less than a high school education will have little hope of securing a decent job. Most will be embedded in the lowest rung of the job market, the very type of jobs that are projected to increase in large numbers over the next several years, but which offer lower wages. The best educated have a leg-up in capturing the jobs that are accelerating at the fastest pace in the South, jobs that pay decent wages and offer

good benefits.

However, what our study makes all to clear is that the path to decent jobs for those with the best education is not without obstacles for some individuals. Females and African Americans appear to have less success in securing the highly touted primary labor market sector jobs when contrasted with males, whites, and Hispanics. And the combination of female and black creates the biggest barrier to capturing decent jobs in the primary labor market sector. Certainly, there may be legitimate factors that prevent some females and African Americans from securing such jobs, but the gaps between these groups and the other population sub-groupings having the same educational credential are so sizable, that gender and race discrimination may very well be at play. This suggests that current discussions being promoted by the White House regarding legislation to ensure pay equity for females and blacks with similar human capital endowments may be well worth a serious look.

There is some evidence to suggest that the quality of jobs available for workers is not the same across spatial location. Those with less than a college education simply will not secure the same type of quality job in rural areas as they would in larger urban or suburban areas. But, surprisingly, well-educated rural Southerners have shown some success in finding employment in primary labor market sectors. The long-term well-being of these rural areas will be linked to their capacity to retain these best-educated workers. As such, attention must continue to be devoted to the generation of new jobs, or expansion of existing firms, that call for well-educated workers. Without a conscientious effort to do so, the flow of the best and brightest to urban and suburban communities from the region's rural localities will accelerate, unless technological advances allow them to carry out their work in the less congested, more natural resource amenity-rich areas of the rural South.

Of course, a viable human capital enhancement strategy that has used time and time again over the years is workforce training. Our study uncovered information that ran counter to the arguments of dual labor market theorists – that opportunities for work-related training would be principally confined to occupants of primary labor market sector jobs. We found just the opposite – that persons in the least attractive labor market sector (lower tier secondary labor market) or with the least amount of education – were the most likely to have been involved in some type job training activity. It is clear that firms are investing resources in shoring up the skills of those workers with the least amount of human capital in hopes of improving their capacity to carry out their job responsibilities.

While the exact nature of these training activities could not be determined in this study, it is quite likely that these training efforts were very specialized and addressed items that dealt with the execution of the specific jobs that persons were hired to perform. Considering the fact that many Southern workers have a high school education or less, and a good portion of them are not likely to enroll and complete any type of post-secondary education program, their best hope for realizing any improvement in their labor market sector positions is to take part in job training activities. In too many communities, however, the process of securing training has been left either to local employers to provide to their workers, or to the workers to seek out by themselves. What communities must realize is that the design and delivery a well-designed and relevant workforce training programs should be embraced as a viable economic development strategy for their localities. This means that communities must take a hard look at with their current economic health, assess what type of worker training programs would further strengthen their current economic base, and determine the types of job training programs that would position them to secure decent jobs that are expected to accelerate over

the next decade and beyond.

The community colleges located in close proximity to these communities and the states' land-grant university system can both serve as important resources to those communities wishing to strategically plan the workforce training needs of their current and future workforce. In all states, a new comprehensive resource will be available to assist counties, parishes and communities in their workforce development and preparation efforts, namely, the local workforce investment boards. These boards are a product of the federal Workforce Investment Act of 1998, a program that provides block grants to states for the purpose of designing a comprehensive workforce preparation and employment system. They are being charged with the responsibility of developing job training, education and employment services that address the labor needs of local labor markets. A key strength of these boards is that their activities will be shaped, in large part, by people at the local level and not by state or federal entities. Community leaders and citizens must become fully engaged in the work of the local investment boards and seek to promote high quality workforce training activities targeted to the large number of workers with little or no education beyond high school. Without such interventions, the prospects of escaping the lowest rung of the secondary labor market become much less likely, especially for those who have not completed high school.

Finally, our study does indicate that a sizable number of young people who graduate from high school move directly into the workforce. Over half of our HS&B participants had a terminal high school education some ten years after graduating from their high schools. Granted, the number of high school students enrolling in post-secondary education programs today is higher than was the case in 1982, the year in which many of our participants completed their high school degrees. But, there remains a good number of students today who still opt to

enter the workforce upon completing high school. As such, communities must take a serious look at strategies that can promote the effective transition of students from high school into local labor markets. To date, creative school-to-work (STW) programs have been implemented in various states, but the quality and accessibility of these programs has been unequal across various areas of the South. One of the most effective programs introduced in recent years has been the "Tech Prep" program (Parnell 1985). The only limitation of this program, however, is that it combines the last two years of the high school curricula with two years of post-secondary courses. Thus, it bypasses non-college bound high school graduates.

What is truly needed is a program that accords non-college bound youth an opportunity to develop job skills during high school that are linked to the employment needs of local businesses and firms. The ingredients for doing so are (at a minimum) fourfold: (1) a school system that is committed to modifying its curriculum so that it encompasses academic course work, up-to-date vocational instruction, and work-readiness programs; (2) highly supportive local business, industry, and government sectors that are willing to offer work-based learning opportunities for non-college bound students; (3) a high school career counseling program that is attuned to the current and emerging needs of the local labor market and is able to offer guidance to non-college bound youth regarding local job opportunities; and (4) engaged parents who can offer important support and guidance relative to their children's career orientations (Ryan and Imel 1996; Way and Rossmann 1996).

The last factor should not be underplayed. When the socioeconomic characteristics of non-college bound high school graduates are examined, one soon realizes that many of these individuals are embedded in families where parental education is limited and family size is large. As such, it is not uncommon for parental aspirations to be low with regard to their children's

educational progress and for the quality and frequency of parent/child nurturing activities to be compromised because of the presence of many children in the home (Blake 1981). The data presented in Table 1 of this report bear this out. The least educated HS&B participants from the South tended to have parents with limited education and were raised in families with many siblings present.

At the same time, it is commonplace for students to be influenced by their parents with regard to career paths. But, parents are often not aware of the nature and needs of the local labor market and as such, have limited knowledge to guide the decisions of their non-college bound children. Thus, if communities and schools are genuinely committed to shaping and implementing an effective school-to-work transition program, parents must be full partners in this effort. This process should include efforts to educate parents about job opportunities available or emerging in local labor markets and delineating the job apprenticeship/job readiness programs available locally to facilitate their children's transition into such jobs.

Of course, the successful establishment of apprenticeship/job readiness programs is linked to the genuine commitment by communities and school systems to help non-college bound persons. As such, an aggressive effort must be made by the schools to more fully explore the wealth of apprenticeship opportunities that might be created in the local labor market (and surrounding areas). What would serve as a significant boast to this effort would be if state (or federal) incentives would be made available to firms that engaged in such apprenticeship activities for non-college bound youth. This could be in the form of wage subsidies, or tax credits, for hiring non-college bound youth during high school, or immediately after high school, and placing them in a formal apprenticeship program that allows them to move into a more skilled job once their apprenticeship is completed. Because the bulk of jobs in many communities (particularly rural

areas) tend to be created by smaller-sized firms, incentives could serve as a critical tool in helping subsidize the expenses that these small firms would have to incur if they were to be active participants in such job preparatory programs. No doubt, the local workforce investment board could be a key partner in helping explore and put in action a number of these strategies.

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Table A.1. Labor Market Sector Experiences of Southern HS&B Participants Over the 1986-92 Period, by Their 1992 Educational Status

Educational Status and Labor Market Sector	YEAR			
	1986	1988	1990	1992
Less than H.S.	(In percent)			
Secondary-Lower	55.3	55.2	54.1	52.5
Secondary-Upper	37.9	37.2	37.7	38.6
Primary-Lower	5.9	5.8	6.8	7.9
Primary-Upper	0.9	1.8	1.4	1.0
High School Degree				
Secondary-Lower	31.8	29.5	28.6	28.6
Secondary-Upper	49.2	48.8	48.8	47.3
Primary-Lower	16.3	18.6	19.1	20.0
Primary-Upper	2.6	3.1	3.5	4.1
Certificate or Associate Degree				
Secondary-Lower	29.0	28.4	26.2	24.4
Secondary-Upper	47.2	46.4	44.7	43.8
Primary-Lower	14.5	14.4	16.3	17.8
Primary-Upper	9.3	10.9	12.8	14.0
Bachelor's Degree or Higher				
Secondary-Lower	17.2	9.7	5.6	4.9
Secondary-Upper	46.0	41.7	37.4	34.5
Primary-Lower	22.1	26.4	29.8	31.5
Primary-Upper	14.6	22.2	27.2	29.1